LAHONTAN REGION (REGION 6)
WATERSHED MANAGEMENT INITIATIVE CHAPTER
JANUARY 2002

EXECUTIVE SUMMARY

The water resource protection efforts of the State Water Resources Control Board and the Regional Water Quality Control Boards are guided by a five year Strategic Plan (updated in 2001). The Strategic Plan lays out the Boards' mission as *"To preserve, enhance and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations."* To help accomplish this mission, a key component of the Strategic Plan is a watershed management approach for water resources protection.

To protect water resources within a watershed management context, a mix of point and nonpoint source discharges, ground and surface water interactions, and water quality/water quantity relationships must be considered. These complex relationships present considerable challenges to water resource protection programs. The State and Regional Boards are responding to these challenges with the Watershed Management Initiative (WMI). The WMI is designed to integrate various surface and ground water regulatory programs while promoting cooperative, collaborative efforts within a watershed. It is also designed to focus limited resources on key issues.

Past State and Regional Board programs tended to be directed at site-specific problems. This approach was reasonably effective for controlling pollution from point sources. However, with diffuse nonpoint sources of pollutants, a new regulatory strategy was needed. The WMI uses a strategy to draw solutions from all interested parties within a watershed, and to more effectively coordinate and implement measures to control both point and nonpoint sources.

For initial implementation of the WMI, each Regional Board identified the watersheds in their Region, prioritized water quality issues, and developed watershed management strategies. These strategies and the State Board's overall coordinating approach to WMI are contained in the Integrated Plan for Implementation of the WMI**.** The Integrated Plan for Implementation of the WMI contains a chapter prepared by each Regional Board. Region 6's targeted watersheds, priorities, and watershed management approach are discussed in the *Lahontan Regional Water Quality Control Board's Watershed Management Initiative Chapter (Chapter).*

Region 6 staff are divided into two offices, one in South Lake Tahoe and one in Victorville. The Region is managed as three divisions: North Lahontan Watersheds, Planning and Toxics, and South Lahontan Watersheds. The Planning and Toxics Division is responsible for water quality planning (Basin Planning, TMDLs), Leviathan Mine site restoration, and toxic cleanup efforts. The North Lahontan Watershed Division has three main Units or Watershed Management Areas (WMAs): Northern WMA, Lake Tahoe Basin WMA, and the Carson/Walker WMA. The South Lahontan Watershed Division has three main WMAs: Mono-Owens WMA, the Mojave WMA and the Antelope Valley/Other Southern WMA. Priorities for FY 02-03 in each Division are shown in Table ES-1.

Initial watershed management efforts in the Region are focused in five targeted watersheds. The Lahontan Regional Board approved the list of targeted watersheds (at regularly scheduled Board meetings in February and March 1996) and identified the Truckee, Upper Truckee, Carson , Upper Owens, and Mojave Rivers as the highest priority watersheds. The Northern WMA includes one targeted watershed: Lower Truckee River. The Lake Tahoe Basin WMA includes the targeted watershed of the Upper Truckee River, the largest tributary to Lake Tahoe. The Carson/Walker WMA includes the targeted watershed of the Carson River. The Mono-Owens WMA includes the targeted watershed of the Upper Owens (Long Hydrologic Area) and the Mojave River is a targeted watershed in the Mojave WMA.

The targeted watersheds were selected based on their resource value, the significance of know water quality problems, and opportunities for implementing current and future RWQCB programs within a 'true' watershed context. This context requires a focus on integrating existing regulatory responsibilities and other program activities to meet region-wide and watershed-specific objectives. Effective application and integration of the regulatory and non-regulatory programs and tools requires intra- and inter- agency coordination, stakeholder involvement, program management, planning, monitoring for effectiveness and technical training on an on-going basis. One staff person is assigned as a Watershed Management Planning Lead for each of the five targeted watersheds. Each Watershed

Lead is responsible for coordinating most functions of the Regional Board associated with watershed management, regional monitoring, TMDL development and implementation, basin planning, core regulation, and nonpoint source pollution control within the targeted watershed.

The current level of Regional Board funding supports an adequate level of regulatory and non-regulatory activities in all watersheds in the region but does not provide additional resources to focus and increase efforts where high priority problems have been identified or in higher priority watersheds. Additional funding would provide more opportunity for, and result in more, watershed-specific problem solving. Planned activities (funded and unfunded) are described for each targeted watershed *in Section Two of the Chapter* and for the region in *Section Three of the Chapter*.

Table ES-2 briefly indicates the water quality problems and needs in each targeted watershed. Expanded descriptions of the conditions and problems in each watershed are contained in *Section Two of the Chapter*.

Watershed Management Contacts:

For more information or copies of the Watershed Management Initiative Chapter, contact Cindy Wise, Watershed Coordinator for Region 6, at (530) 542-5408 or rofec@rb6s.swrcb.ca.gov For questions specific to the targeted watersheds, contact the appropriate Watershed Management Planning Leads as shown below. Additionally, readers can visit Region 6's website at http://www.swrcb.ca.gov/~rwqcb.

Truckee River -- Scott Ferguson at (530) 542-5432
Upper Truckee River – Mary Fiore-Wagner at (530) 542-5425
Carson River -- Alan Miller at (530) 542-5430
Upper Owens River -- Cindi Mitton at (760) 241-7413
Mojave River -- Mike Plaziak at (760) 241-7384

Table ES-1 Priorities for FY 02-03 in each Division of the Lahontan Regional Board.

Planning and Toxics Division			
Priority	**Description**	**Action**	**Watershed**
Lake Tahoe TMDL	The loss of pelagic and nearshore clarity. Issues include complex source analysis and implementation planning.	Develop the Lake Tahoe Nutrient and Sediment TMDL by 2006..	Lake Tahoe
Squaw Creek TMDL	Excessive sedimentation in violation of water quality standards, damage to beneficial uses. Likely litigation from SVSC.	Complete TMDL by 2003 and begin work on implementation to reduce sediment loading.	Truckee River
Truckee River TMDL	Excessive sedimentation in violation of water quality standards, damage to beneficial uses.	Complete TMDL by 2005 and begin work on implementation. Hold major public workshop to kick off Truckee River TMDL Collaborative Project in 5/02.	Truckee River
Indian Creek Reservoir TMDL	Eutrophication and impact to beneficial uses.	Adopt Basin Plan amendments for TMDL. Coordinate the revised TMDL implementation program with stakeholders.	Carson River
Haiwee Reservoir	Copper has killed fish and exceeds CTR values	Complete TMDL by 2003. Work with stakeholders on toxicity analysis.	Owens River
Clean Water Act 303d list update	Impaired waters need to be identified in order to direct resources to them.	Develop 303(d) list update recommendations, identify priorities.	Regionwide
Leviathan Mine	Acidic mine drainage to creeks. State owns property; Superfund site; litigation between State and ARCO; 303(d) listed waters	Continue treatment and stabilization efforts. Seek funding for continuation.	Carson River
Tahoe Tom's gas station cleanup	Contaminated soil and groundwater threaten numerous drinking water wells. Litigation by dischargers.	Continue pressure on dischargers to cleanup and abate pollution. Assist Attorney General in litigation.	Lake Tahoe
Meyers Beacon gas station cleanup	Drinking water wells threatened and/or impacted..	Continue investigation and cleanup efforts.	Lake Tahoe

Allied Petroleum spill/leak cleanup	Municipal drinking water wells threatened and/or impacted.	Continue investigation and cleanup efforts.	
North Lahontan Watersheds Division			

Lake Tahoe water quality and nonpoint pollution prevention studies (under contracts with the Regional Board)	The loss of pelagic and nearshore famed clarity; specifc causes have not been characterized.	Provide oversight of contracts to ensure deliverables are achieved according to time schedules. Involves development of several large research contracts, and coordination with several agencies. Data from these studies is crucial for development the Lake Tahoe TMDL.	Lake Tahoe
Caltrans NPDES Storm Water Control Program and Projects/Enforcement	Division-wide, Caltrans' large construction projects, ongoing maintenance activities, and snow and ice control methods have significant adverse effects on water quality.	Coordinate, oversee and enforce as necessary to ensure implementation of NPDES Permit and programmatic requirements.	Regionwide
Squaw Valley	Enforcement actions underway for continued discharge of sediment and parking lot stormwater runoff.	Coordinate with the California Attorney General as necessary on enforcement. Continue to conduct comprehensive project reviews and inspections.	Truckee River
Permit Updates-TTSA, Susanville CSD, Heavenly Valley Ski Area (HVSA)	Three of the more significant facilities within the northern part of Lahontan region.	Update permits	Truckee River Susan River Lake Tahoe
Colorado Hill Mining District and Other Abandoned (USFS) Mines, Alpine County	Past mining activities and mine waste disposal resulted in ground and surface water pollution at many sites which is affecting water quality and beneficial uses.	Oversee USFS CERCLA activities and coordinate development of remediation plan	Carson River
Construction/Stormwater Issues for Truckee	Significant urbanization, subdivision, and roadway development in the watershed threatens to increase impacts on sediment loads and other pollutants in stormwater.	Regulate activities and discharges through a combination of CEQA review, NPDES stormwater permits, 401 WQC and waivers. Continue to work with other partners such as the Town of Truckee, and the local watershed group to leverage.	Truckee River
Aquatic Pesticides Basin Plan Amendments	The Basin Plan, in effect, prohibits the use of aquatic pesticides in waters of the Region (with certain exceptions). The	Prepare Basin Plan amendments to authorize uses of aquatic pesticides under specific circumstances, namely to control vectors and	Regionwide

	SWRCB has adopted a statewide GP that authorizes use of aquatic pesticides in a manner that currently conflicts with certain Basin Plan objectives.	aquatic weeds.	
Shorezone Issues-401 WQC for private piers and Basin Plan Amendments	Based on an assessment of potential impacts to water quality, the RB may choose to prepare a Basin Plan amendment to lift the prohibition on new pier development. Pollutants include exhaust components from motorized watercraft and pollutants associated with the construction of piers including the resuspension of nutrients and bottom sediments.	If appropriate, prepare a Basin Plan amendment to allow new piers in fish spawning habitat and coordinate with other agencies on CWA Section 401 Water Quality Certification.	Lake Tahoe
Memorandums of Understanding -TRPA/LRWQCB MOU -County Septic/LRWQCB MOU -USFS/LRWQCB MOU	Ensure that MOUs are being adhered to such that water quality is being protected. Ensure appropriate control measures are being implemented when water quality problems are identified.	Work closely with the MOU partners to achieve an MOU that is useful for both parties. An effective MOU should avoid duplication of regulatory and permitting oversight.	Lake Tahoe and Regionwide
Timber Harvest Plans and herbicides	herbicide use associated with timber harvest activities are not be actively managed through CDF's THP program which could be resulting in significant threat of herbicide discharges to surface waters in violation of Basin Plan.	For all future THPs that indicate future herbicide use, request information regarding herbicide use, require and review monitoring plans, and issue WDRs as appropriate.	Regionwide
Waiver Policy	The current waiver policy may not provide adequate water quality protection.	Inventory and review waivers for adequacy	Regionwide
South Lahontan Watersheds Division			
Priority	**Description**	**Action**	**Watershed**
Molycorp	Past mine waste disposal resulted in ground water	Continue to implement enforcement orders and	Mojave River

	pollution at many sites. TDS and radioactive constituents migrated offsite.	permit conditions. Review corrective action plans.	
PG&E Hinkley	Hexavalent chromium and total chromium ground water plume exists at the site.	Continue to implement enforcement orders and permit conditions	Mojave River
Los Angeles County SD #14 –Lancaster	Potential degradation of uppermost aquifer beneath Paiute Ponds.	To reduce toxicity, review alternative methods for effluent treatment and disposal Pursue preservation, creation and restoration of wetlands and wildlife habitat.	Antelope Valley
Los Angeles County SD #20 –Palmdale	Contamination of ground water by NO_3 and TDS potentially affecting existing beneficial uses.	Revise discharge permit to require a series of best management practices to minimize or eliminate the threat to water quality from using secondarily-treated effluent to irrigate fodder crops.	Antelope Valley
Basin Plan Amendments	Assigned beneficial uses for various water bodies may not exist or be attainable.	Prepare use attainability analyses to determine appropriate beneficial uses for the water bodies in question and propose changes in beneficial use designations if appropriate.	Regionwide
Mammoth Area Sediment Control	Potential inadequate erosion control for construction.	Inspect and take appropriate follow-up during spring runoff, ensure proper runoff controls are used. Educate construction industry on proper use of BMPs.	Owens River
Mojave River Ground Water Protection	Impacts to ground water from point and non-point sources.	Determine appropriateness of WQOs. Work with Stakeholders to reduce and control salinity inputs.	Mojave River
IMCC	Impacts to wildlife from discharges for three facilities.	Complete thorough site investigation. Determine appropriate cleanup goals, complete cleanup. Address beneficial uses through basin planning process.	Searles Lake
Financial Assurance Documents (FADs)	FADs for private mining companies may or may not be current and	Track FADs' annual submittals for adequacy and completeness.	Regionwide

	sufficient.		
UST Sites Tosco, Main Stop, and Mammoth Unocal	Local ground water contamination from past TPH releases.	Complete site cleanup.	Owens River

Table ES-2 Water Quality Problems and Needs in each Targeted Watershed.

TARGETED WATERSHED	PROBLEMS	NEEDS
Lower Truckee River	303d listed for sediments, erosion, urban development, highways and railroad, treated wastewater disposal, septic, reservoir management, construction, grazing, forest management, recreation, surface and ground water quantity/quality issues, habitat loss/degradation	stakeholder outreach and education, develop Coordinated Resources Management Plan (CRMP), refine and expand scope of monitoring plan to ID and target specific pollution loads, implement routine and storm event monitoring, further TMDL development, develop performance standards, wetlands and riparian resource assessment and identification of potential restoration sites.
Upper Truckee River	Lake Tahoe has increasing phytoplankton productivity and decreasing transparency (Upper Truckee is major tributary to L. Tahoe); Within the watershed, erosion, forest management, grazing, recreation, hydrologic modification, stormwater, construction, wetlands disturbance.	stakeholder outreach and education, establish action plan, develop watershed map showing land ownership, project location, etc., data inventory, develop appropriate time scale (long term, short term, etc.) for monitoring, ID most effective BMP and management strategies, inventory watershed improvement needs and identify funding options to coordinate implementation, assess Stream Environment Zone (SEZ) stormwater treatment capabilities, evaluate existing date for suitability for TMDL development, do phased TMDLs for sediment, phosphorus, nitrogen, develop information clearinghouse
Carson River	acid mine drainage and sediment, degradation of aquatic communities, high metals levels, grazing, highway and urban runoff, septic, forest management, wastewater disposal, water quantity/water quality issues	stakeholder outreach and education, refine problem assessment, define success criteria, develop and implement coordinated monitoring plan, coordinate and optimize funding sources, expand existing nonpoint source program and facilitate voluntary activities, provide technical support for the voluntary activities, complete phase I TMDL work for some tributaries, begin TMDL development for other 303(d) listed waters, revise 303(d) list as a result of monitoring and assessment data, implement Leviathan Mine Five Year Workplan, conduct comprehensive assessment of metal loading sources and identify management strategies to reduce the impacts from the loading, watershed improvements for Monitor Creek such as control sources of metal and acid mine drainage, and grazing controls, wetlands and riparian assessment, restoration, and protection.
Upper Owens River	hydrologic modifications, water quality/quantity issues, recreation, wetland and riparian impacts, grazing, forest management, erosion from construction, water quality limited segments	stakeholder outreach and education, facilitate voluntary implementation of BMPs, ID and quantify nutrient loading into Crowley Reservoir, complete limnological survey of Crowley, inventory and review existing data and GIS capabilities, develop and implement surface water monitoring plan, pursue development of regional wetlands restoration projects, develop a riparian and wetlands restoration plan for Mammoth Creek, develop TMDLs for water quality limited segments, determine need for and then develop if necessary a stormwater runoff monitoring plan for the Town of Mammoth Lakes; assess impacts of Whitmoore Hot

TARGETED WATERSHED	PROBLEMS	NEEDS
		Springs Pool on receiving waters
Mojave River	evaluation of existing water quality standards needed, surface and ground water quantity/quality issues, septic, stormwater, USTs, DoD facilities, SLIC sites, flood control and wetland issues, abandoned mines, eradication of exotic species, improperly abandoned wells	stakeholder outreach and education, surface and ground water sampling and analyses, information management (GIS, data inventory), facilitate voluntary BMPs for nonpoint source impacts from irrigated agriculture and confined animal facilities, development of TMDLs, coordination with flood control interests for riparian and wetlands protection, wetlands and riparian inventory, assessment and identification of restoration opportunities